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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,319	05/24/2001	Michael J. Garvin	9-13528-159US	1365

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EXAMINER
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CHAVIS, JOHN Q

ART UNIT	PAPER NUMBER
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2124

DATE MAILED: 04/08/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/863,319

Applicant(s)

GARVIN, MICHAEL J.

Examiner

John Chavis

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings filed 05-24-01 are approved by the examiner.

### ***Priority***

2. The applicant's priority date is considered to be 05-24-01.

### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it is longer than 150 words.

Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 20 is rejected as unclear for not specifically and

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distinctly claiming the invention, since it references itself (dependent on itself).

Therefore, this claim is not being treated further on the merits because it is not clear what is intended.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-19 and 21-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Burrows (5,745,898).

**CLAIMS:**

1. A method of compressing file-reference data related to information symbols in a source file, comprising steps of:

retrieving location data related to each location of respective ones of the information symbols in the source file;  
compressing the location data using a run encoding compression method to construct an encoded data structure; and

**Burrows**

See the title and the abstract.

See col. 4 lines 35-43.

See again the location above and col. 7 lines 31-54, which specifically encodes (compresses) fields (attributes which includes address (location data). See also col. 10 line 66-col. 11 line 5.

storing the encoded data  
structure in a computer-  
readable storage medium.

See col. 8 lines  
47-52.

2. The method as claimed in claim  
1 wherein the run encoding  
compression method comprises a  
step of encoding the location  
data in the encoded data  
structure as one or more runs,

See col. 11 lines  
6-30.

each run including a first code  
for representing a first  
location of the information  
symbol in a section of the  
source file encoded by the run,  
and, if the information symbol  
occurs more than once in the  
section of the source file, a  
second code representing one  
or more additional locations  
of the information symbol in  
the section of the source file.

See col. 11 lines  
31-41.

See col. 12 lines  
44-48.

3. The method as claimed in claim  
2 wherein the first code is a  
binary number representative of a  
line number in the source file.

See again the  
address information  
above, which is  
inherently binary, since it  
is the  
standard means of  
accessing data in a  
computer and the only  
language the system truly  
understands. Also,  
see col. 6 lines 45-52.

4. The method as claimed in claim  
3 wherein the second code is a  
binary string that serves as a  
bit map representing one or more  
additional lines offset from the  
line number in the source file in

See the rejections  
above.

which the information symbol occurs at least once.

5. The method as claimed in claim 4 wherein each run has a variable length, and each run further comprises a third code for indicating a length of the second code.

This feature is considered inherent when multiple runs occur, since the length would inherently decrease on each consecutive run.

6. The method as claimed in claim 3 wherein each run further includes a fourth code indicating a length of the first code.

See the rejection of claim 5 above.

7. The method as claimed in claim 1 wherein the source file is a source code file, and the information symbols are source code identifiers.

See the description information in fig. 4.

8. The method as claimed in claim 7 wherein the location data comprises a representation of one or more line numbers in the source code file on which a respective information symbol is referenced.

See the address information in fig. 4 and item 250. See also fig. 9 item 225.

9. The method as claimed in claim 8 wherein the location data further comprises at least one representation of a column number for each line number represented in the location data and the at least one representation is stored in the computer-readable medium in association with the encoded data structure.

See the rejection of claim 8 above.

10. The method as claimed in claim 1 further comprising a

See again the abstract and figs.

step of parsing the source file  
to derive the file-reference data,  
and the step of retrieving  
comprises retrieving the location  
data from cross-reference line  
tables built during the step of  
parsing.

9-11 and fig. 7.

11. The method as claimed in  
claim 1 further comprising steps  
of:

See the rejection  
of claim 5 above.

compressing the information  
symbol into a code having a  
predetermined length; and  
storing the code of  
predetermined length in the  
computer-readable medium in  
association with the respective  
encoded data structure.

12. The method as claimed in  
claim 1 wherein the data  
structure is a one of a B-Tree,  
M-Tree, quad-tree and hashing-  
based structure.

See the rejections  
above.

In reference to claims 13-14, see the rejection of claims 1-2.

As per claims 15-18, see the rejection of claims 5-8.

The features of claim 19 are taught via col. 8 lines 40-49. The Java code includes  
class information.

Claim 21 is rejected as claim 12.

As per claims 22-24, see the rejection of claim 1.

In reference to claim 25, see the rejection of claim 3.

As per claims 26-27, see the col. 21 lines 34-41 and col. 22 lines 54-65.

The features of claim 28 is taught via col. 22 lines 66-col. 23 line 31.

**Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Chavis whose telephone number is (703) 305-9665. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703) 305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jqc  
April 2, 2004



JOHN CHAVIS  
PATENT EXAMINER  
ART UNIT 2124